ABSTRACT OF THE DISCLOSURE

The invention relates to a rotary friction welding process for joining or connecting components, where a first component is moved rotationally and where a second component is stationary. The rotating component and the stationary component are pressed against one another with a specific force and joining surfaces of the components being connected to one another are adapted to one another. A connection bead is formed in the area of the joining surfaces. A relative position and a compression between the components being connected to one another are measured. When a pre-specified compression and a pre-specified relative position are reached, the stationary component is released in such a way that it rotates jointly with the rotating component.